

What is claimed is:

1. A method of providing a service in a mobile communication system having a plurality of user equipments and a fixed station, the system having a protocol including a physical layer and a plurality of upper layers above the physical layer, comprising:

sending a message from the fixed station to a user equipment through the physical layer of the fixed station and the user equipment, wherein the message contains an identification code corresponding to a service;

receiving the message at a first upper layer of the user equipment above the physical layer of the user equipment; and

determining at the upper layer of the user equipment whether to pass the message to a second upper layer of the user equipment.

2. The method according to claim 1, wherein the upper layer uses the identification code to determine whether to pass the message to the second upper layer of the user equipment.

3. The method according to claim 2, wherein a list of identification codes is received from the fixed station.

4. The method according to claim 2, wherein a list of identification codes is received from an upper layer above the first layer.

5. The method according to claim 1, wherein the message has a format including a header, and the identification code is contained in the header.
6. The method according to claim 1, wherein the first upper layer includes a medium access control (MAC) layer.
7. The method according to claim 6, wherein the message has a MAC packet data unit format including a header having a message type and the identification code.
8. The method according to claim 7, wherein the message type is a target channel type field (TCTF).
9. The method according to claim 1, wherein the identification code is a permanent code.
10. The method according to claim 1, wherein the identification code is a temporary code.
11. The method according to claim 1, wherein the fixed station includes multiple identification codes corresponding to multiple services available.
12. The method according to claim 10, wherein each identification code corresponds to a single service.
13. The method according to claim 1, wherein a service corresponding to an identification code is added or deleted by the fixed station.
14. The method according to claim 1, wherein a service is added or deleted according to services required by the user equipment.

15. The method according to claim 1, wherein the message is sent using a common channel.

16. The method according to claim 1, wherein the message is sent using a dedicated logical channel.

17. A method of providing a service in a mobile communication system having a plurality of user equipments and a fixed station, the system having a protocol including a physical layer and a plurality of upper layers above the physical layer, comprising:

receiving, at a first upper layer above the physical layer of the user equipment, a message transmitted from the fixed station, wherein the message contains an identification code corresponding to a service; and

determining whether to pass the message to a second upper layer of the user equipment.

18. The method according to claim 17, wherein determining whether to pass the message to a second upper layer of the user equipment includes:

comparing the received identification code included in the received message with a stored identification code in a memory; and

passing the message to a second upper layer of the user equipment when the received message with the identification code matches the stored identification code in the memory.

19. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 17.

20. A method of providing a multimedia broadcast/multicast service in a mobile communication system having a plurality of user equipments and a fixed station, the system having a protocol including a physical layer and a plurality of upper layers above the physical layer, comprising:

receiving, at a first upper layer above the physical layer of the user equipment, a message transmitted from the fixed station through the physical layer of the fixed station, wherein the message contains an identification code corresponding to a service; and

determining, at the first upper layer of the user equipment, whether to pass the message to a second upper layer of the user equipment.

21. A method of providing a multimedia broadcast/multicast service (MBMS) in a mobile communication system having a plurality of user equipments and a fixed station, the system having a protocol including a physical layer and a plurality of upper layers above the physical layer, comprising:

generating a message including an identification code field corresponding to a specific MBMS;

transmitting the message from the fixed station via the physical layer of the fixed station for receipt by the first upper layer of the user equipment; and

determining, at the first upper layer of the user equipment, whether to pass the received message to a second upper layer of the user equipment.

22. A mobile communication system having a plurality of user equipments and a fixed station, the system having a protocol including a physical layer and a plurality of upper layers above the physical layer, said mobile communication system comprising:

means for sending a message from the fixed station to a user equipment through the physical layer of the fixed station and the user equipment, wherein the message contains an identification code corresponding to a service;

means for receiving the message at a first upper layer of the user equipment above the physical layer of the user equipment; and

means for determining at the upper layer of the user equipment whether to pass the message to a second upper layer of the user equipment.

23. A mobile communication system having a plurality of user equipments and a fixed station, the system having a protocol including a physical layer and a plurality of upper layers above the physical layer, comprising:

means for generating a message including an identification code field corresponding to a service;

means for transmitting the message from the fixed station via the physical layer of the fixed station for receipt by the first upper layer of the user equipment; and

means for determining at the first upper layer of the user equipment whether to pass the received message to a second upper layer of the user equipment.

24. A user equipment for use in a mobile communication system having a protocol including a physical layer and a plurality of upper layers above the physical layer, comprising:

means for receiving, at a first upper layer above the physical layer of the user equipment, a message transmitted from the fixed station, wherein the message contains an identification code corresponding to a service; and

means for determining whether to pass the message to a second upper layer of the user equipment.

25. The user equipment according to claim 24, wherein means for determining includes:

means for comparing the received identification code included in the received message with a stored identification code in a memory; and

means for passing the message to a second upper layer of the user equipment when the received message with the identification code matches the stored identification code in the memory.

26. A message for being transmitted from a fixed station to a plurality of user equipments in a mobile communication system, said message having a format including a header and data,

said header having an identification code corresponding to a specific multimedia broadcast/multicast service (MBMS).

27. The message according to claim 26, wherein the identification code one-to-one corresponds to a service provided by a fixed station.

28. The message according to claim 26, wherein said header further comprises a target channel type field (TCTF).

29. The message according to claim 28, wherein the message has a format of [TCTF][Identification Code][Data].

30. A method for providing multimedia broadcast/multicast service in a mobile communication system having a plurality of user equipments and a fixed station, the system having a protocol including a physical layer and a plurality of upper layers above the physical layer, said method comprising:

assembling a header and data for a message to forward to the user equipments, said header including an identification code corresponding to a specific multimedia broadcast/multicast service;

transmitting said message from the fixed station to the user equipment through the physical layers of the fixed station and the user equipment;

comparing at the user equipment the received identification code included in the received message with a stored identification code in a memory; and

passing the message to a second upper layer of the user equipment when the received identification code included in the received message matches the stored identification code in the memory.